

SUPPORT FOR THE AMENDMENT

Support for the amendment to claim 1 is found on page 17, lines 1 and 21 of the specification. No new matter would be added to this application by entry of this amendment.

Upon entry of this amendment claims 1-3, 5-12, 14 and 16-21 will remain active in this application, with claims 1-3, 5-8, 10-12, 14 and 16-21 being under active consideration.

REQUEST FOR RECONSIDERATION

The claimed invention is directed to a hair cosmetic composition.

Hair quality can be reduced as a result of physical and chemical actions (drying, brushing, shampooing, dyeing, bleaching) and as well as by aging. Hair conditioning composition containing ceramide or glycosylceramide have been proposed but experience difficulty in formulation and effectiveness due to a high melting point and ease of crystallization of the conditioning agent. Accordingly an improved hair cosmetic composition based on an amphipathic amide lipid is sought.

The claimed invention addresses this problem by providing a hair cosmetic composition comprising **0.001 to 5 wt. %** of an amphipathic amide lipid and **0.05 to 5 wt. %** of an ethylene glycol monofatty acid ester or ethylene glycol difatty acid ester containing in said fatty acid composition thereof, from 65 to 90 wt. % of stearic acid and mixtures thereof **in a ratio of from 1:1 to 1:30** to provide a pearlescent and stable dispersion of components in which adsorption to the hair of the amphipathic amide lipid is promoted. Such a composition is nowhere disclosed or suggested in the cited references of record.

The rejection of claims 1-3, 5-8, 10-12, 14 and 16-21 under 35 U.S.C. §112, first paragraph, written description is respectfully traversed.

Applicants respectfully submit that, based on applicants' disclosure, those of ordinary skill in the art would be convinced that applicants were in possession of a hair cosmetic composition comprising amphipathic amide lipid and component (B) in a ratio of from 1:1 to 1:30.

The disclosure of ratios of 5:1 to 1:1,000 and 1:2 to 1:30 on page 18, line 2-6 of the specification coupled with examples 5 and 6 on pages 30 and 31 of the specification at an ratio of 1:1, a ratio which is within the broad range, would convince those of ordinary skill in

the art that applicants were in possession of the range of sub-range of 1:1 to 1:30. Certainly possession of the broad range and possession of specific embodiments within the broad range would convince those of ordinary skill in the art that applicants were in possession of the range of 1:1 to 1:30.

Accordingly, withdrawal of the rejection under 35 U.S.C. §112, first paragraph, written description is respectfully requested.

The rejection of claims 1-3, 5-8, 10-12, 14 and 16-21 under 35 U.S.C. 103(a) over Hoshina et al. EP 1,166,766 and XP-002295514 ('514) in view of Uchiyama et al. U.S. 5,876,705 is respectfully traversed.

The cited combination fails to suggest the combination of amphipathic amide lipid (A) and component (B) in **a ratio of from 1:1 to 1:30**.

Hoshino et al. had been cited for a disclosure of an external preparation which comprises 0.001 to 50 wt. % of an amphipathic amide lipid **but fails to disclose the claimed component (B)** nor a cationic polymer.

Uchiyama et al. describes a conditioning shampoo comprising about 5 to about 50 wt. % of a deterative surfactant, about 0.9 to about 10 wt. % of a fatty compound, about 0.05 to about 20 wt. % of a hair conditioning agent which can be a nonvolatile dispersed silicone conditioning agent, and about 20 to about 94.05 wt. % of water (column 2, lines 23-41). In order to assist with dispersion of the silicone hair conditioning agent, a silicone suspending agent may be added (column 21, lines 48-51). Ethylene glycol stearate is described as a preferred silicone dispersant for suspending the silicone hair conditioning agent, in an amount of 0.1 to 10 wt. % (column 21, lines 48-50 and 62-65). There is no disclosure of an amphipathic amide lipid. Thus, Uchiyama et al.'s reason for including ethylene glycol stearate in a conditioning shampoo composition would be to act as **a suspending agent for a silicone hair conditioning agent**.

XP '514 has been cited for a disclosure that ethylene glycol distearate is an example of an opacifier and pearly gloss-imparting substance in hair shampoos. Amounts of such compounds used to achieve an opacifying effect or in order to impart a pearly gloss are **not disclosed**.

The three references separately disclose the two components of the claimed composition, but do not suggest the combination of the two in a hair cosmetic composition.

In contrast, the claimed invention is directed to a hair cosmetic composition comprising an amphipathic amide lipid (A) and a component (B) in a ratio of 1:1 to 1:30. The claims recite a ratio of components (A):(B) of 1:1 to 1:30.

It would not have been obvious to include components (A) and (B) in a hair cosmetic composition in a ratio of 1:1 to 1:30 as the cited art **does not disclose any relationship** between the two components. A ratio defines a **relationship** between two components. Thus as the amount of one component changes the amount of the second component must be accessed to determine whether the ratio is maintained. Thus, in order for a ratio to be obvious there must be an identification of a relationship between the two components.

In the present case **a relationship** between the amounts of amphipathic amide lipid and component (B) is **not suggested** since the two materials are separately identified in **separate references**. Due to the separate nature of the two disclosures, no relationship between the amounts of the two components is suggested.

On page 4 of the outstanding official action, the examiner reasons that the amount of 0.001-50 wt. % of the amphipathic amide lipid of Hoshino et al. when combined with the 0.1-10 wt. % of silicone dispersant as disclosed in Uchiyama et al. would meet the claimed ratio of 1:1 to 1:30. The examiner is expressing an inherency theory for arriving at a ratio of amphipathic amide lipid to component (B) within the claimed range of 1:1 to 1:30.

Notwithstanding the lack of motivation to even include the silicone suspending agent of Uchiyama et al. in the silicone lacking composition of Hoshino et al., the claimed ratio of 1:1 to 1:30 would not be met. The reason that the claimed ratio is not met by the use of the suggested amounts of the separate components from separate references, is that the range of ratios defined by the suggested amounts is so broad as to not suggest the claimed ratio.

Based on the endpoints of concentrations for the two agents one **could calculate** a range of ratios of 500:1 to 1:10,000. There are literally 14,999 integer ratios described. Such a broad range fails to make obvious the claimed range of 1:1 to 1:30. The claimed range of 1:1 to 1:30 is less than 0.5% of the disclosed range.

However, if the reference's disclosed range is so broad as to encompass a very large number of possible distinct compositions, this might present a situation analogous to the obviousness of a species when the prior art broadly discloses a genus. *Id.* See also *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); MPEP § 2144.08. MPEP 2144.05 I

Thus, even accepting the examiner's proposition of using the suggested amounts of amphipathic amide lipid and a silicone suspending amount of component (B), the ratio suggested would be so broad as to not suggest the claimed range of only 1:1 to 1:30.

No Suggestion Of Only 65-95 Wt.% of Stearic Acid Ester

Uchiyama et al. is cited for disclosing the claimed stearic acid ester (page 4 of official action). The citation at column 21, lines 48-65 of the reference identifies a preferred suspending agent of ethylene glycol esters of fatty acids, preferably having from about 16 to 22 carbon atoms. More preferred are the ethylene glycol stearates, both mono and diestearate, but particularly the diestearate containing less than about 7% of the monostearate. Thus, a suspending agent which is comprised of 100% stearic acid esters is preferred. There is **no suggestion** of a ethylene glycol ester having only 65-90 wt. % of stearic acid esters.

XP-002295514 only describes the compound ethylene glycol distearate, an ethylene glycol ester which has 100 wt. % stearic acid ester.

Thus, the only two references cited by the examiner disclose only 100 wt. % stearic acid esters. Accordingly, the claim limitation of only 65-90 wt % of stearic acid ester has not been shown to be obvious. Therefore, the limitation is not obvious. As the cited art fails to make obvious this claim limitation, withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

Withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

Applicants submit that this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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